

Applicant: Willig *et al.*
For: PHOTONIC CRYSTAL INTERFEROMETRIC FIBER OPTICAL
GYROSCOPE SYSTEM

5

ABSTRACT OF DISCLOSURE

A photonic crystal interferometric optical gyroscope system including a light source for providing a primary beam of light, a photonic crystal sensing coil having a rotational axis, and a beam controlling device configured to split the primary beam into first and second counter-propagating beams in the photonic crystal sensing coil and
10 configured to direct return of the counter-propagating beams wherein the power of the returning counter-propagating beams represents the phase shift between the counter-propagating beams and is indicative of the rate of rotation of the coil about the rotational axis.